

## Special Analysis

### SOUTH AFRICA: Ready To Accede to the NPT

*After delaying some 20 years, South Africa appears ready to accede to the Non-Proliferation Treaty (NPT), possibly as early as this spring. The International Atomic Energy Agency (IAEA) will face the unique problem of developing procedures to safeguard nuclear material in an ostensibly non-nuclear-weapons country that probably has nuclear weapons and a large inventory of highly enriched uranium (HEU).*

[REDACTED]

[REDACTED]

### Safeguards, HEU, and Nuclear Weapons

South Africa has two uranium enrichment plants, a pilot plant and a so-called semicommercial one, both using an aerodynamic enrichment process. Pretoria's inventory of HEU was produced in the pilot plant, which was to shut down as of 1 February. [REDACTED]

Existing international safeguards are intended to verify that enrichment plants do not produce highly enriched uranium, and the IAEA has inspection procedures only for enrichment by the centrifuge process. The IAEA currently has no procedures for inspecting enrichment plants of the aerodynamic type operating in South Africa nor for plants that have produced HEU nor for HEU inventories. Before IAEA safeguards can be applied in South Africa, such inspection procedures would have to be developed and agreed to by the IAEA and Pretoria. [REDACTED]

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The perception that South Africa joined the NPT while maintaining a nuclear weapons capability could significantly damage the treaty's credibility.

[REDACTED]

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F(b)(3)

### Pretoria's Agenda

South Africa expects that the international community will enthusiastically welcome its accession to the NPT. Such a move may prompt other African NPT holdouts to join and would rid the IAEA of the contentious political issue of South African nonadherence, which has led to the perennial calls for expelling Pretoria from the IAEA. South African NPT membership would also give advocates of the treaty a sense of momentum for the fourth NPT review conference, set for later this year. [REDACTED]

Pretoria's key motivations probably are to get access to nuclear technology and to reduce its international isolation. South Africa does not yet have the infrastructure for a self-sufficient nuclear power industry and apparently believes it will gain access to foreign nuclear suppliers—in spite of antiapartheid sanctions—if it acceded to the NPT. [REDACTED]

[REDACTED] if South Africa does accede, Foreign Minister P. W. Botha expects to participate in the NPT review conference with full rights and privileges. Pretoria is particularly interested in discussing Article IV of the treaty, which states that parties have a right to the "fullest possible exchange of equipment, materials, and scientific and technological information for the peaceful uses of nuclear energy." [REDACTED] South Africa has had technical problems with its nuclear power plants in Koeberg and its enrichment facilities at Valindaba. Pretoria may view accession as a means of getting help with these problems. Accession might also help President de Klerk's attempts to reduce South Africa's international diplomatic and political isolation and enhance its security in the region. [REDACTED]

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